IN THE CLAIMS:

1   1. (Currently Amended): A method of ~~building~~ attempting to build credentials for a

2   user of a device connected to a network, the method comprising ~~the steps of~~:

3   providing, ~~a plurality of credential descriptors~~ to a first credential builder

4   included in a first device connected to the network, a credential descriptor that

5   describes a plurality of credentials;

6   using the first credential builder to ~~attempting~~ to build ~~credentials~~

7   ~~corresponding to~~ at least one of the credentials described by the credential descriptors

8   ~~using the first credential builder~~;

9   providing ~~at least one~~ a credential descriptor that describes at least one ~~for~~

10   ~~which a corresponding~~ credential ~~was~~ not built ~~in~~ by the first credential builder ~~the~~

11   ~~first building step~~ to a second credential builder included in a second device

12   connected to the network; and

13   using the second credential builder to ~~attempting~~ to build ~~credentials~~

14   ~~corresponding to~~ at least one credential described by the ~~of the~~ credential

15   descriptor ~~descriptors~~ provided ~~in the second providing step using the second~~

16   ~~credential builder~~ to the second credential builder.

1   2. (Currently Amended):   The method of claim 1 further including ~~the steps of~~:

2   providing the credentials built using the first and second credential builders to

3   a credential evaluator included in the first device or the second device; and

4   evaluating the built credentials by using the credential evaluator to determine

5   whether the built credentials satisfy the ~~plurality of~~ credential ~~descriptors~~ descriptor

6   for the device.

1   3. (Currently Amended): The method of claim 1 further including ~~the steps of~~:

2   providing the credentials built using the first and second credential builders to

3   a credential evaluator included in a device connected to the network that is different

4   from the first and second devices; and

5   evaluating the built credentials <u>by</u> using the credential evaluator to determine

6   whether the built credentials satisfy the ~~plurality of~~ credential ~~descriptors~~ <u>descriptor</u>

7   for the device.

1   4. (Currently Amended): The method of claim 1 further including ~~the steps of~~:

2   providing ~~at least one~~<u>a</u> credential descriptor <u>that describes at least one</u> ~~for~~

3   ~~which a corresponding~~ credential ~~was~~ not built in the second building step to the first

4   credential builder; and

5   attempting to build credentials corresponding thereto <u>by</u> using the first

6   credential builder.

1   5. (Currently Amended): The method of claim 1 further including ~~the steps of~~:

2   , providing ~~at least one~~ <u>a</u> credential descriptor <u>that describes</u> at least one ~~for~~

3   ~~which a corresponding~~ credential ~~was~~ not built ~~in~~ <u>by using</u> either the first or the

4   second ~~building step~~<u>credential builder</u> to a third credential builder included in a

5   device connected to the network that is different from the first and second devices;

6   and

7   <u>using the third credential builder to</u> attempt~~ing~~ to build <u>at least one</u>

8   <u>credential</u>~~credentials~~ <u>described by the credential descriptor provided to</u> ~~corresponding~~

9   ~~thereto using~~ the third credential builder.

1   6. (Currently Amended): The method of claim 1 further including ~~the step of~~

2   generating the ~~plurality of~~ credential <u>descriptor</u>~~descriptors~~ for the device.

7. (Currently Amended): A system used to <u>attempt to</u> build credentials for a user of a device connected to a network, comprising:

a first credential builder operative to build credentials <u>described by</u> ~~corresponding to at least one of a plurality of~~<u>a</u> credential <u>descriptor</u>~~descriptors~~ for the device; and

a second credential builder operative to build ~~credentials corresponding to~~ at least another one of the ~~plurality of~~<u>credentials described by the</u> credential descriptors for the device,

wherein the first credential builder and the second credential builder are included in different devices connected to the network.

8. (Original): The system of claim 7 further including a master credential evaluator operative to evaluate credentials built by the first and second credential builders.

9. (Original): The system of claim 8 wherein the credential evaluator is included in the same device as the first credential builder or the second credential builder.

10. (Currently Amended): The system of claim 8 wherein the credential evaluator is included in a device different from the <u>first and second</u> devices ~~including the first and second credential builders~~.

11. (Currently Amended): A method of ~~building~~<u>attempting to build</u> credentials for a user of a device, the method comprising ~~the steps of:~~

providing a <u>master</u> ~~plurality of~~ credential ~~descriptors~~<u>descriptor</u> to a master credential builder that includes a plurality of credential builders<u>,</u> ~~for building a corresponding plurality of different types of credentials for the device~~<u>each of which:</u>

    A)   <u>is associated with a respective credential type;</u>

7   B)   takes an input that includes an input set of zero or more

8   credentials and an input credential descriptor that describes at

9   least one credential to be built;

10   C)   attempts to build a given credential described by the credential

11   builder if the given credential is of the credential type associated

12   with that credential builder; and

13   D)   generates an output that includes:

14   i)   an output set of credentials that includes the input set of

15   credentials as well as any credential that that credential

16   builder has been successful in building; and

17   ii)   an output credential descriptor that describes each

18   credential described by the input credential descriptor

19   that that credential builder has not been successful in

20   building,

21   the credential builders being linked in a series in such a manner that the input

22   credential descriptor and set of credentials of each credential builder but the first

23   credential builder in the series include the output credential descriptor and set of

24   credentials of the preceding credential builder; and

25   employing the master credential builder to attempting to build at least one

26   credentials credential described by corresponding to at least one of the master

27   credential descriptors descriptor using the master credential builder.

1   12. (Currently Amended):   The method of claim 11 wherein, if the master

2   credential builder has built credentials as a result of having attempted to build

3   credentials, the method further including includes the steps of :

4   providing the credentials built by using the master credential builder to a

5   master credential evaluator that includes a plurality of credential evaluators for

6   evaluating a corresponding plurality of different types of credentials for the

7   device; and

8   <u>using the master credential evaluator to</u> ~~evaluating~~<u>evaluate</u> the ~~built~~

9   credentials <u>provided thereto</u> ~~by using the master credential evaluator~~ to determine

10   whether ~~the~~ <u>those</u> ~~built~~ credentials satisfy the ~~plurality of~~ credential ~~descriptors~~

11   <u>descriptor</u> for the device.

1   13. (Currently Amended): The method of claim 11 further including ~~the step of~~

2   generating the ~~plurality of~~ credential ~~descriptors~~ <u>descriptor</u> for the device.

1   14. (Currently Amended): Apparatus used to <u>attempt to</u> build credentials for a user

2   of a device, comprising[[:]]

3   <u>a</u> master credential builder for building credentials <u>described by</u> ~~corresponding to at~~

4   ~~least one of~~ a ~~plurality of~~ credential ~~descriptors~~ <u>descriptor</u> for the device, the master

5   credential builder including a plurality of credential builders<u>,</u> each <u>of which:</u>

6   <u>A)   is associated with a respective credential type;</u>

7   <u>B)   takes an input that includes an input set of zero or more credentials and</u>

8   <u>an input credential descriptor that describes at least one credential to be</u>

9   <u>built;</u>

10   <u>C)   attempts to build a given credential described by the credential builder</u>

11   <u>if the given credential is of the credential type associated with that</u>

12   <u>credential builder; and</u>

13   <u>D)   generates an output that includes:</u>

14   <u>i)   an output set of credentials that includes the input set of</u>

15   <u>credentials as well as any credential that that credential builder</u>

16   <u>has been successful in building; and</u>

17   <u>ii)   an output credential descriptor that describes each credential</u>

18   <u>described by the input credential descriptor that that credential</u>

19   <u>builder has not been successful in building,</u>

20   <u>the credential builders being linked in a series in such a manner that the input</u>

21   <u>credential descriptor and set of credentials of each credential builder but the first</u>

22 credential builder in the series include the output credential descriptor and set of

23 credentials of the preceding credential builder~~operative to build a credential of a~~

24 ~~different type for the device~~.

1 15. (Currently Amended): The apparatus of claim 14 further including a master

2 credential evaluator for, if the master credential builder has built credentials as a

3 result of having attempted to build credentials, evaluating the credentials built by the

4 master credential builder to determine whether the ~~built~~ credentials built by the

5 master credential builder satisfy the ~~plurality of~~ credential ~~descriptors~~ descriptor for

6 the device, the master credential evaluator including a plurality of credential

7 evaluators operative to evaluate a corresponding plurality of different types of

8 credentials for the device.

1 16. (Currently Amended): The apparatus of claim 14 further including a credential

2 descriptor generator for generating the ~~plurality of~~ credential descriptor~~descriptors~~

3 for the device.

1 17. (Currently Amended): A method of ~~building~~ attempting to build credentials for

2 a user of a device, the method comprising ~~the steps of~~:

3   providing a ~~plurality of~~ credential ~~descriptors~~ descriptor to a master credential

4 builder, the master credential builder including at least one credential builder that:

5   A)   is associated with a respective credential type;

6   B)   takes an input that includes an input set of zero or more credentials and

7   an input credential descriptor that describes at least one credential to be

8   built;

9   C)   attempts to build a given credential described by the credential builder

10   if the given credential is of the credential type associated with that

11   credential builder; and

12 D)   generates an output that includes:

13   i)   an output set of credentials that includes the input set of

14   credentials as well as any credential that that credential builder

15   has been successful in building; and

16   ii)   an output credential descriptor that describes each credential

17   described by the input credential descriptor that that credential

18   builder has not been successful in building;

19 adding at least one different credential builder to the master credential builder

20 to form a modified master credential builder in such a manner that the credential

21 builders are so linked in a series that the input credential descriptor and set of

22 credentials of each credential builder but the first credential builder in the series

23 include the output credential descriptor and set of credentials of the preceding

24 credential builder; and

25 using the modified master credential builder to ~~attempting~~ attempt to build

26 credentials corresponding to at least one of the plurality of credential descriptors

27 ~~using the modified master credential builder~~.

1 18. (Currently Amended): The method of claim 17 further including ~~the steps of~~ :

2 providing the ~~different~~ credentials built by the modified master credential

3 builder to a master credential evaluator;

4 forming a modified master credential evaluator by adding to the master

5 credential evaluator different credential evaluators corresponding to at least a portion

6 of the ~~different~~ credentials provided to the master credential evaluator ~~to the master~~

7 ~~credential evaluator to form a modified master credential evaluator~~; and

8 evaluating the credentials corresponding to at least one of the ~~credentials~~

9 credential evaluators by using the modified master credential evaluator.

1   19. (Currently Amended):   The method of claim 18 further including ~~the step~~

2   ~~of~~ removing credential evaluators that do not correspond to at least one of the

3   credentials from the master credential evaluator.

1   20. (Currently Amended):   The method of claim 17 further including ~~the step of~~

2   generating the ~~plurality of different~~ credential ~~descriptors~~ descriptor for the device.

1   21. (Currently Amended):   A method of ~~building~~ attempting to build credentials for

2   a user of a device, the method comprising ~~the steps of~~:

3   providing a ~~plurality of~~ credential ~~descriptors~~ descriptor to a master credential

4   builder, the master credential builder including a plurality of credential builders, each

5   of which:

6   A)   is associated with a respective credential type;

7   B)   takes an input that includes an input set of zero or more credentials and

8   an input credential descriptor that describes at least one credential to be

9   built;

10   C)   attempts to build a given credential described by the credential builder

11   if the given credential is of the credential type associated with that

12   credential builder; and

13   D)   generates an output that includes:

14   i)   an output set of credentials that includes the input set of

15   credentials as well as any credential that that credential builder

16   has been successful in building; and

17   ii)   an output credential descriptor that describes each credential

18   described by the input credential descriptor that that credential

19   builder has not been successful in building,

20 the credential builders being linked in a series in such a manner that the input

21 credential descriptor and set of credentials of each credential builder but the first

22 credential builder in the series include the output credential descriptor and set of

23 credentials of the preceding credential builder;

24   removing at least one of the credential builders from the master credential

25 builder to form a modified master credential builder; and

26   using the modified master credential builder to ~~attempting~~ attempt to build

27 credentials corresponding to at least one of the credentials described by the credential

28 ~~descriptors~~ descriptor ~~using the modified master credential builder~~.

1 22. (Currently Amended): Apparatus used to attempt to build credentials for a user

2 of a device, comprising:

3   a master credential builder including a plurality of credential , each of which:

4   A)   is associated with a respective credential type;

5   B)   takes an input that includes an input set of zero or more credentials and

6   an input credential descriptor that describes at least one credential to be

7   built;

8   C)   attempts to build a given credential described by the credential builder

9   if the given credential is of the credential type associated with that

10   credential builder; and

11   D)   generates an output that includes:

12   i)   an output set of credentials that includes the input set of

13   credentials as well as any credential that that credential builder

14   has been successful in building; and

15   ii)   an output credential descriptor that describes each credential

16   described by the input credential descriptor that that credential

17   builder has not been successful in building,

18 the credential builders being linked in a series in such a manner that the input

19 credential descriptor and set of credentials of each credential builder but the first

20 credential builder in the series include the output credential descriptor and set of

21 credentials of the preceding credential builder ~~builders operative to build credentials~~

10

22 corresponding to at least one of a plurality of credential descriptors for the device;

23 and

24   at least one processor operative to execute first program code to remove at

25 least one credential builder from the master credential builder in response to a

26 first event, and second program code to add at least one credential builder to the

27 master credential builder in response to a second event.

1 23. (Original): The apparatus of claim 22 further including a master credential

2 evaluator including a plurality of credential evaluators operative to evaluate

3 credentials built by the master credential builder, the at least one processor being

4 operative to execute third program code to remove at least one credential evaluator

5 from the master credential evaluator in response to a third event, and operative to

6 execute fourth program code to add at least one credential evaluator to the master

7 credential evaluator in response to a fourth event.

1 24. (Currently Amended): The apparatus of claim 22 further including a credential

2 descriptor generator for generating the ~~plurality of~~ credential ~~descriptors~~ descriptor

3 for the device.

1 25. (Currently Amended): A method of ~~building~~ attempting to build credentials for

2 a user of a device, the method comprising the steps of:

3   providing a master credential builder having ~~a~~ at least one credential builder

4 builder that:

5   A)   is associated with a first type of credential;

6   B)   takes an input that includes an input set of zero or more credentials and

7   an input credential descriptor that describes at least one credential to be

8   built;

9   C)   attempts to build a given credential described by the credential builder

10   if the given credential is of the type of credential associated with that

11   credential builder; and

12   D)   generates an output that includes:

13   i)   an output set of credentials that includes the input set of

14   credentials as well as any credential that that credential builder

15   has been successful in building; and

16   ii)   an output credential descriptor that describes each credential

17   described by the input credential descriptor that that credential

18   builder has not been successful in building; and

19   ~~for building a first type of credential;~~

20   in response to a predetermined event, forming a modified master credential

21 builder by adding ~~an additional credential builder~~ to the master credential builder an

22 additional credential builder, associated with ~~for building~~ a type of credential

23 different from the first type of credential, in such a manner that the credential

24 builders are so linked in a series that the input credential descriptor and set of

25 credentials of each credential builder but the first credential builder in the series

26 include the output credential descriptor and set of credentials of the preceding

27 credential builder ~~to form a modified master credential builder~~; and

28   attempting to build at least one credential by using the modified master

29 credential builder.

1 26. (Currently Amended):   Apparatus used to attempt to build credentials for a

2 user of a device, comprising:

3   a master credential builder, having a credential builder that:

4   A)   is associated with a first type of credential;

5   B)   takes an input that includes an input set of zero or more credentials and

6   an input credential descriptor that describes at least one credential to be

7   built;

8 C)   attempts to build a given credential described by the credential builder

9   if the given credential is of the credential type associated with that

10   credential builder; and

11 D)   generates an output that includes:

12   i)   an output set of credentials that includes the input set of

13   credentials as well as any credential that that credential builder

14   has been successful in building; and

15   ii)   an output credential descriptor that describes each credential

16   described by the input credential descriptor that that credential

17   builder has not been successful in building operative to build a

18   first type of credential; and

19 a processor operative, in response to a predetermined event, to execute

20 program code to add at least one credential builder to the master credential builder

21 in such a manner that the credential builders are so linked in a series that the input

22 credential descriptor and set of credentials of each credential builder but the first

23 credential builder in the series include the output credential descriptor and set of

24 credentials of the preceding credential builder in response to a predetermined

25 event, the at least one added credential builder being operative to build a type of

26 credential different from the first type of credential.

1 27. (Canceled)

1 28. (Canceled)

1 29. (Canceled)

1 30. (Canceled)

1 31. (Currently Amended):   Apparatus used to attempt to build credentials for a user

2 of a device connected to a network, comprising:

3   means for generating for the device a ~~plurality of~~ credential

4 ~~descriptors~~descriptor that describes a plurality of credentials~~for the device~~;

5   means for providing the credential ~~descriptors~~descriptor to a first credential

6 builder;

7   means for using the first credential builder to ~~building~~ at least one of the

8 credentials ~~corresponding to at least one of~~described by the credential

9 descriptor~~descriptors using the first credential builder~~;

10   means for providing to a second credential builder ~~at least one~~a credential

11 descriptor that describes at least one~~for which a corresponding~~ credential ~~was~~not

12 built in the first building step~~to a second credential builder~~; and

13   means for using the second credential builder to ~~building credentials~~

14 ~~corresponding to~~at least one credential described by~~of~~ the credential ~~descriptors~~

15 descriptor provided ~~in~~to the second ~~providing step~~credential builder~~using the second~~

16 ~~credential builder~~;

17   wherein the first credential builder and the second credential builder are

18 included in different devices connected to the network.

1 32. (Currently Amended):   A method of evaluating credentials for a user of a

2 device, comprising~~the steps of~~:

3   providing a master ~~plurality of~~credential ~~descriptors~~descriptor and a plurality

4 of credentials for the device to a master credential evaluator including a plurality of

5 credential evaluators, each of which:

6   A)   is associated with a respective credential type;

7   B)   takes an input that includes an input set of at least one credential and an

8   input credential descriptor that describes at least one credential to be

9   evaluated;

10   C)   attempts to evaluate a given credential in the input set if the given

11   credential is described by the credential descriptor and is of the

12   credential type associated with that credential evaluator; and

13   D)   generates an output that includes the input set of credentials and an

14   output credential descriptor that describes each credential that is

15   described by the input credential descriptor but has not successfully

16   been evaluated by that credential evaluator,

17 the credential evaluators being linked in a series in such a manner that the input

18 credential descriptor and set of credentials of each credential evaluator but the first

19 credential evaluator in the series include the output credential descriptor and set of

20 credentials of the preceding credential evaluator ~~for evaluating a corresponding~~

21 ~~plurality of different types of credentials~~; and

22   evaluating the plurality of credentials <u>by</u> using the master credential evaluator

23 to determine whether the plurality of credentials satisfies the ~~plurality of~~<u>master</u>

24 credential ~~descriptors~~<u>descriptor</u>.

1 33. (Currently Amended):   A method of evaluating credentials for a user of a

2 device, comprising the steps of:

3   providing a<u> master</u> ~~plurality of~~credential ~~descriptors~~<u>descriptor </u>and a plurality

4 of credentials for the device to a master credential evaluator including at least one

5 credential evaluator<u>, each of which</u>:

6   A)   is associated with a respective credential type;

7   B)   takes an input that includes an input set of at least one credential and an

8   input credential descriptor that describes at least one credential to be

9   evaluated;

10   C)   attempts to evaluate a given credential in the input set if the given

11   credential is described by the credential descriptor and is of the

12   credential type associated with that credential evaluator; and

13   D)   generates an output that includes the input set of credentials and an

14   output credential descriptor that describes each credential that is

15   described by the input credential descriptor but has not successfully

16   been evaluated by that credential evaluator;

17   forming a modified credential evaluator by adding at least one credential

18   evaluator to the master credential evaluator in such a manner that the credential

19   evaluators are so linked in a series that the input credential descriptor and set of

20   credentials of each credential evaluator but the first credential evaluator in the series

21   include the output credential descriptor and set of credentials of the preceding

22   credential evaluator to form a modified master credential evaluator; and

23   evaluating at least one of the credentials by using the modified master

24   credential evaluator to determine whether the at least one credential satisfies at least

25   one of the master plurality of credential descriptorsdescriptor.

1   34. (Currently Amended):   A method of evaluating credentials for a user of a device,

2   comprising the steps of:

3   providing a plurality ofmaster credential descriptors descriptor and a plurality of

4   credentials for the device to a master credential evaluator including a plurality of credential

5   evaluators, each of which:

6   A)   is associated with a respective credential type;

7   B)   takes an input that includes an input set of at least one credential and an

8   input credential descriptor that describes at least one credential to be

9   evaluated;

10   C)   attempts to evaluate a given credential in the input set if the given

11   credential is described by the credential descriptor and is of the

12   credential type associated with that credential evaluator; and

13   D)   generates an output that includes the input set of credentials and an

14   output credential descriptor that describes each credential that is

15   described by the input credential descriptor but has not successfully

16   been evaluated by that credential evaluator,

17   the credential evaluators being linked in a series in such a manner that the input

18   credential descriptor and set of credentials of each credential evaluator but the first

19   credential evaluator in the series include the output credential descriptor and set of

20   credentials of the preceding credential evaluator;

21   removing at least one of the credential evaluators from the master credential

22   evaluator to form a modified master credential evaluator; and

23   evaluating at least one of the credentials by using the modified master credential

24   evaluator to determine whether the at least one credential satisfies ~~at least one of~~ the

25   ~~plurality of~~master credential descriptor~~descriptors~~.

1   35. (Currently Amended):   A method of evaluating credentials for a user of a device,

2   comprising the steps of:

3   providing a master credential evaluator having a credential evaluator that:

4   A)   is associated with a first type of credential;

5   B)   takes an input that includes an input set of at least one credential and an

6   input credential descriptor that describes at least one credential to be

7   evaluated;

8   C)   attempts to evaluate a given credential in the input set if the given

9   credential is described by the credential descriptor and is of the

10   credential type associated with that credential evaluator; and

11   D)   generates an output that includes the input set of credentials and an

12   output credential descriptor that describes each credential that is described by

13   the input credential descriptor but has not successfully been evaluated by that

14   credential evaluator~~for evaluating a first type of credential~~;

15   in response to a predetermined event, adding to the master credential evaluator an

16   additional credential evaluator, the credential evaluators being linked in a series in such

17   a manner that the input credential descriptor and set of credentials of each credential

18 evaluator but the first credential evaluator in the series include the output credential

19 descriptor and set of credentials of the preceding credential evaluator, the additional

20 credential evaluator being associated with for evaluating a type of credential different

21 from the first type of credential to the master credential evaluator; and

22   evaluating at least one credential using the master credential evaluator.